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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,928	03/05/2002	Akira Hiroshige	Q68813	5282

7590 10/05/2005

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EXAMINER
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KASSA, YOSEF

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/087,928

Applicant(s)

HIROSHIGE ET AL

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,10,11 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 2-4,7-9 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments see the remark on page 6-16, filed on June 16, 2005, with respect to rejections of claims 1-15 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made on Yang et al (U.S. Patent 6,377,313), and further in view of Savicki (U.S. Patent 5,345,327):

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6, 10, 11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S. Patent 6,377,313), and further in view of Savicki (U.S. Patent 5,345,327).

With regard to claim 1, Yang discloses extracting an edge of the image from the digital data (see col. 3, lines 21-30),

Selecting preset filter information based on the calculated edge information (see col. 2, lines 33-43);

Smoothing, i.e., remove aliasing, all of the digital data based on the selected filter information (see col. 5, lines 41-46).

Yang does not explicitly call for calculating edge information comprising a grade and a direction of a slope of the extracted edge. However, at the same field of endeavor, Savicki discloses this feature (see col. 3, lines 28-34). At the time of invention was made, it would have been obvious to a person of an ordinary skill in the art to incorporate the teaching of Savicki digital image process system into Yang system. The suggestion/motivation of doing so would have been to provide a system to enhancement the detected edge digital image signal information. Therefore, it would have been obvious to combine Savicki with Yang to obtain the invention as specified in claim 1.

Claim 5 is similarly analyzed and rejection the same as claim 1.

Claim 6 is similarly analyzed and rejection the same as claim 1. As to the additional limitation of "a filter information reading step of detecting specific filter information stored in the recording unit " (see Fig. 3A, item 13a comprised different filter information).

Claims 10, 11 and 13 are similarly analyzed and rejection the same as claim 6.

With regard to claim 14, Yang discloses further comprising inputting image data and converting image data into the digital data (see Fig. 1, item 116).

With regard to claim 15, Yang discloses wherein a shape of a smoothing range depends on the grade of the slope (see 2, lines 23-32).

***Claim Rejections - 35 USC § 101***

3. Claims 6 and 10 are rejected under 35 U.S.C. 101 because the claimed invention of is directed to non-statutory subject matter. Claims 6 and 10 recites the limitation "a recording medium storing a computer program intended for use with an image processing apparatus..." which are non-statutory. A program is functional descriptive material, and is only statutory when embodied in a computer readable medium. Applicant may overcome this rejection by rewriting the limitation "a recording medium storing a computer program..." as "A computer medium or a computer readable medium storing or comprising..." (See MPEP 2106).

***Allowable Subject Matter***

4. Claims 2-4, 7-9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Other Prior Art Cited***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers 5742642, 6173084 and 5216477.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from

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the examiner should be directed to YOSEF KASSA whose telephone number is (571) 272-7452. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (571) 272-7453. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and (571) 272-26000 for after Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.


For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

#### **PATENT EXAMINER**

Yosef Kassa



09/30/05.



**BHAVESH M. MEHTA**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**